

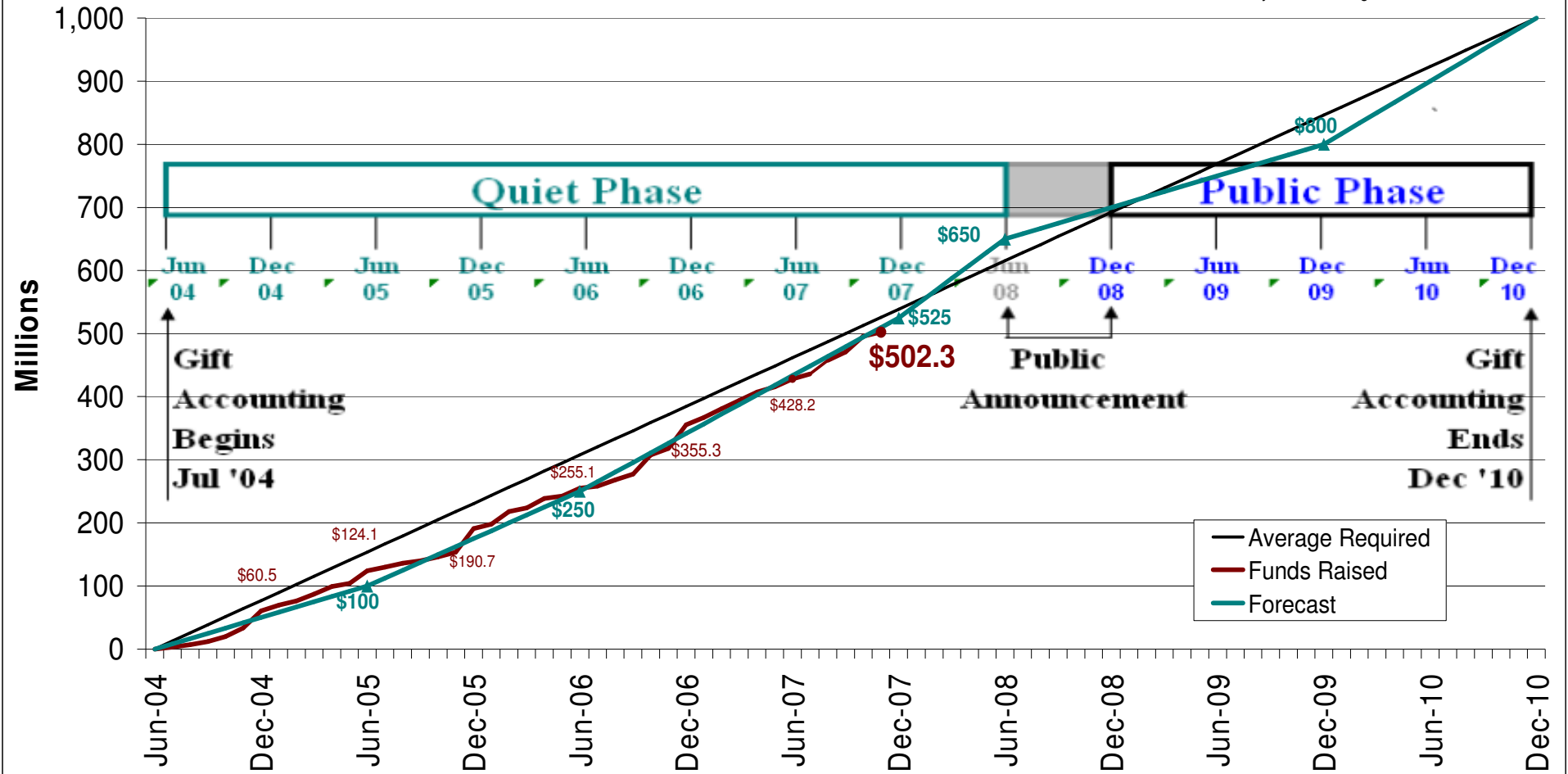
# Interdisciplinary Initiatives: Interaction of campaign and research

President G. Wayne Clough

Georgia Tech Research Corporation  
December 11, 2007

# Summary of Objectives Funds Raised v Required

July 1, 2004 through November 30, 2007



# Energy and sustainability

- Strategic Energy Initiative
  - ▷ Integrates, facilitates and enables Institute-wide programs in energy research and development
  - ▷ Includes: solar, nuclear, biofuels, fuel cells, carbon capture, combustion, demand reduction
- Institute for Sustainable Systems
  - ▷ Energy and global climate change
  - ▷ Ecosystem response
  - ▷ Technology transfer, commercialization

# Energy and sustainability

Institute for  
Sustainable  
Systems



David Sholl

Tennenbaum GRA  
Chair in Energy

# Energy and sustainability

Research partnerships:



Biofuels:  
Chevron



Combustion:  
Conoco Phillips



Carbon separation  
discussions:  
Southern Company  
ExxonMobil  
Saudi Aramco



# Global Water Research Institute at Emory and Georgia Tech

- Other partners: CARE, CDC, Carter Center
- Potential donor: The Coca-Cola Company

Global Water Stewardship, adopted by the company in June, will improve the company's internal water stewardship and support better water management and quality in the communities the company serves around the world.

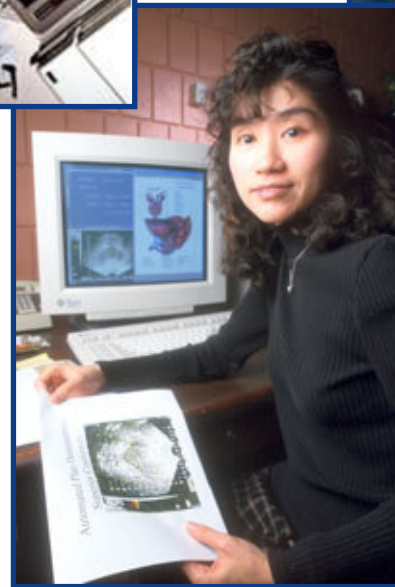


# Biotechnology and health

Innovative  
Partnerships:

Children's Health  
Care of Atlanta

Georgia Cancer  
Coalition



# High performance computing

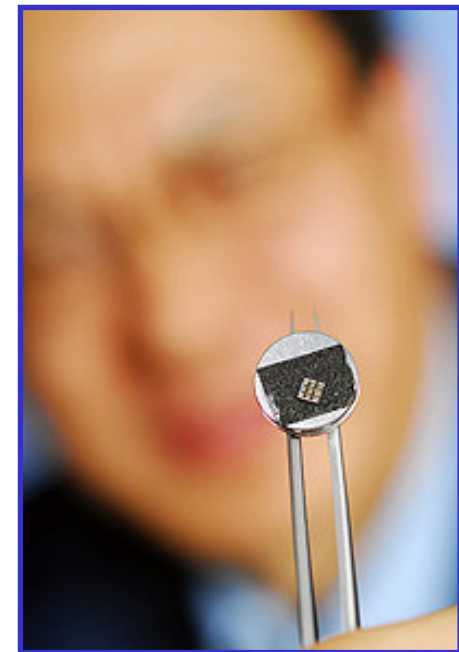
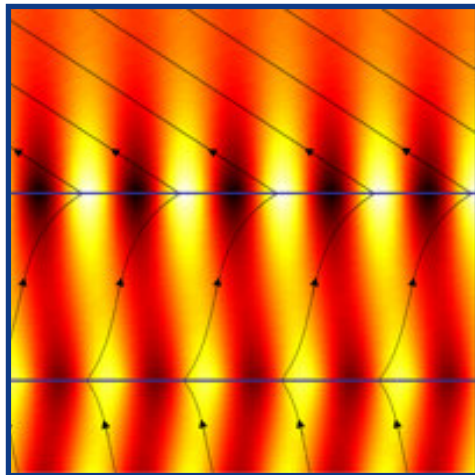


- Applications at Georgia Tech:
  - ▷ Computational biology
  - ▷ Health information systems
  - ▷ Climate change
  - ▷ Chaos modeling
- \$4 million in-kind donation from IBM for the “Razor”
- Ongoing discussions about peta-scale computing at Georgia Tech
- Discussions with Gordon and Betty Moore Foundation about storing, modeling biodiversity



# Nanotechnology

Discussions with:  
Kavli Foundation  
GE



# Global education

King Abdullah University of  
Science and Technology

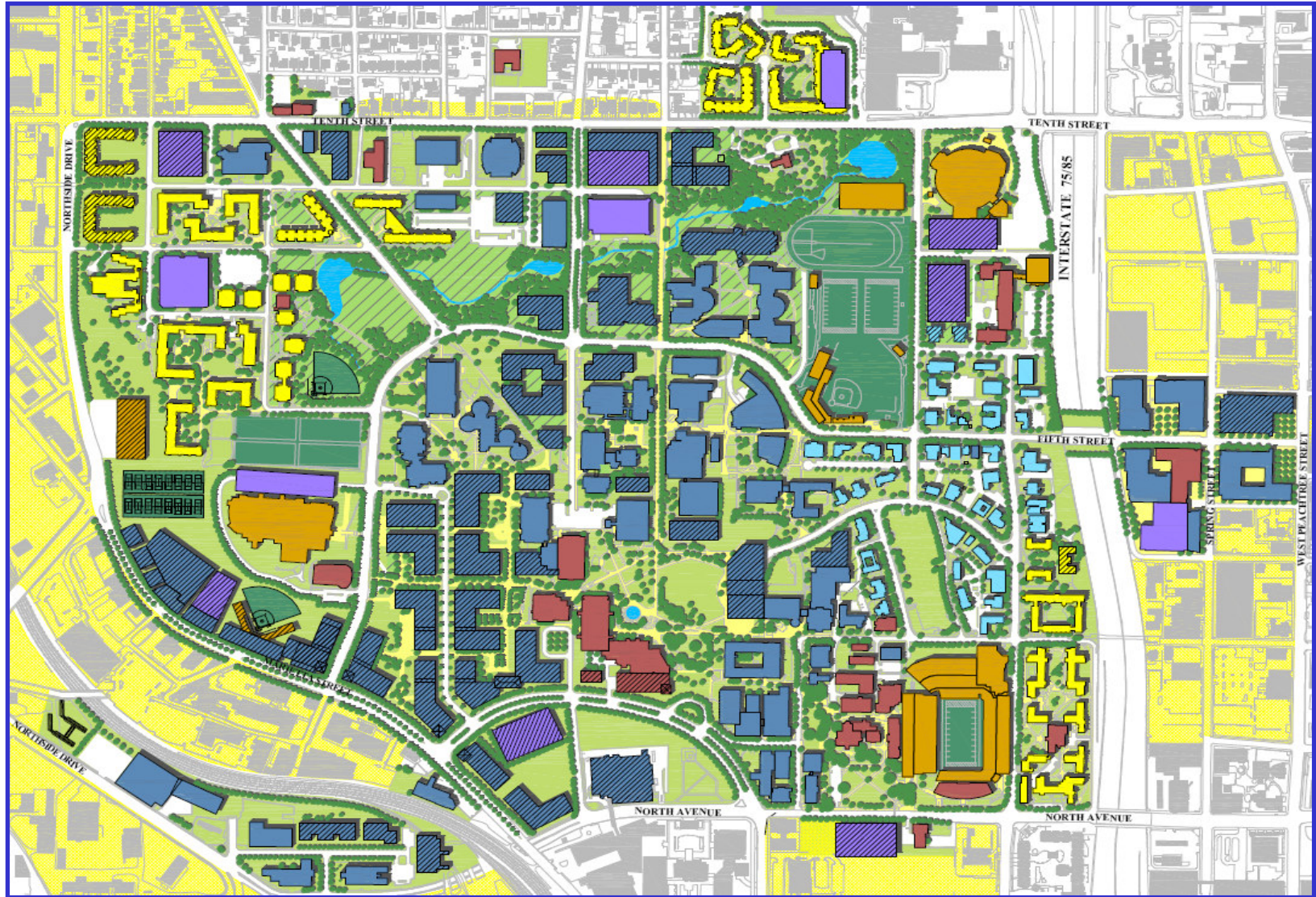


Other  
discussions:

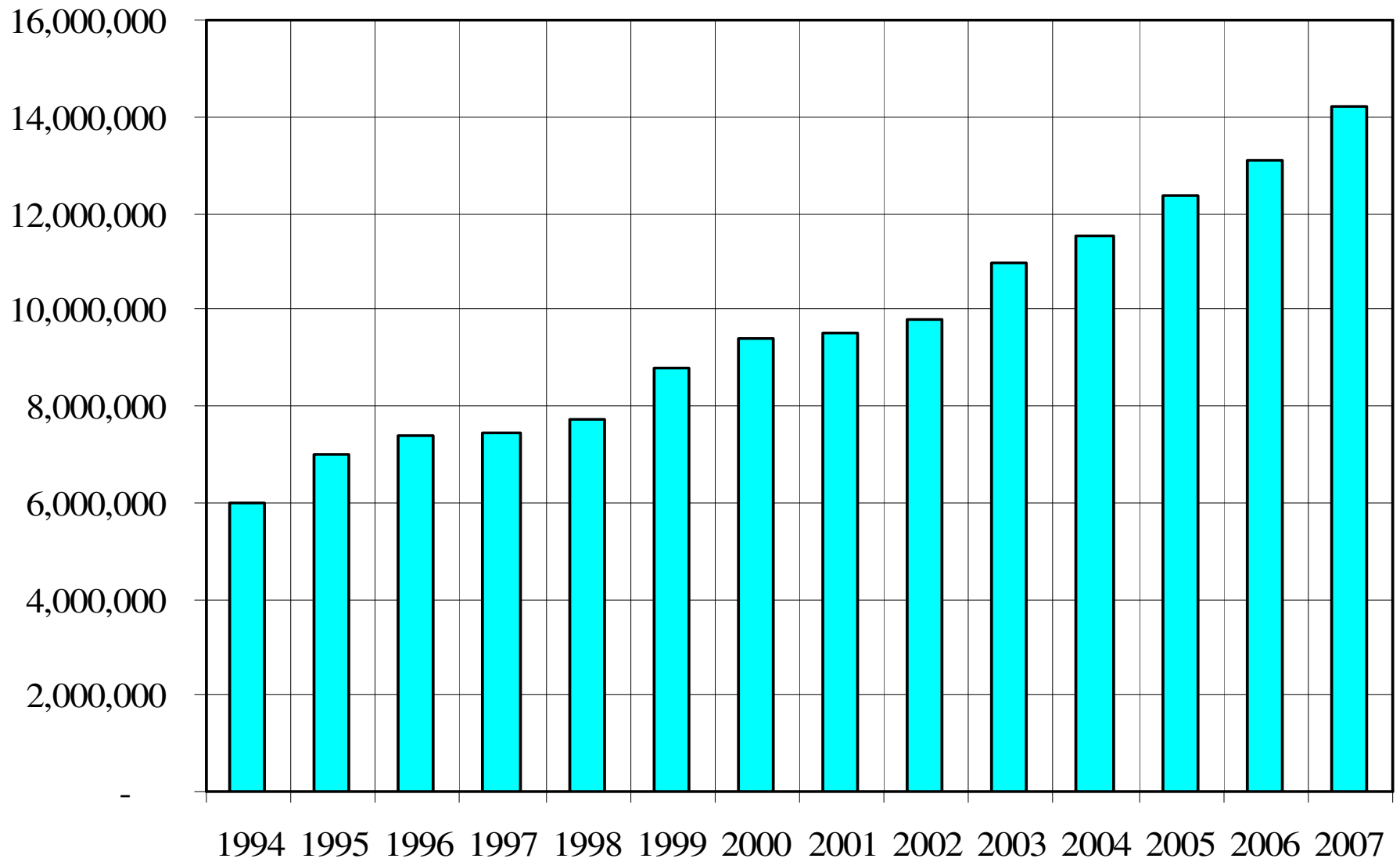
India  
China



# Building for the Future

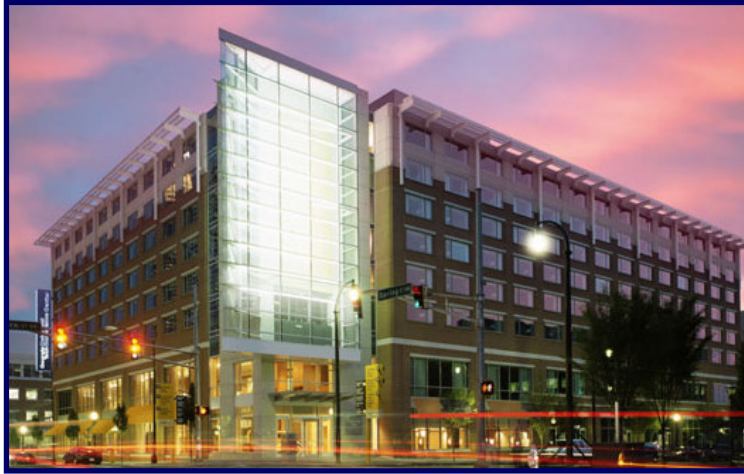


## Gross Square Footage





# Technology Square





# Biotechnology Complex



# Marcus Nanotechnology Building



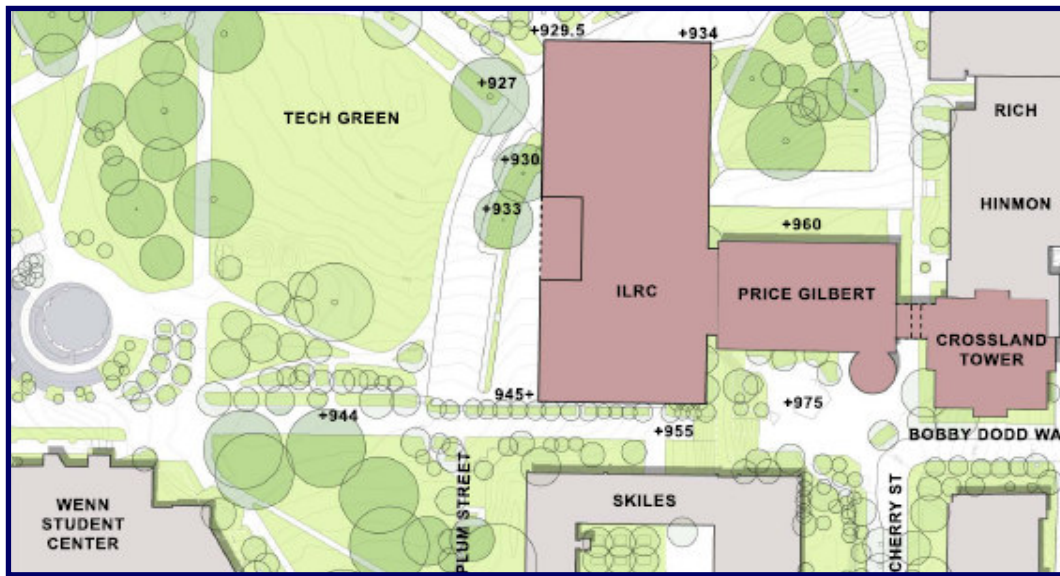
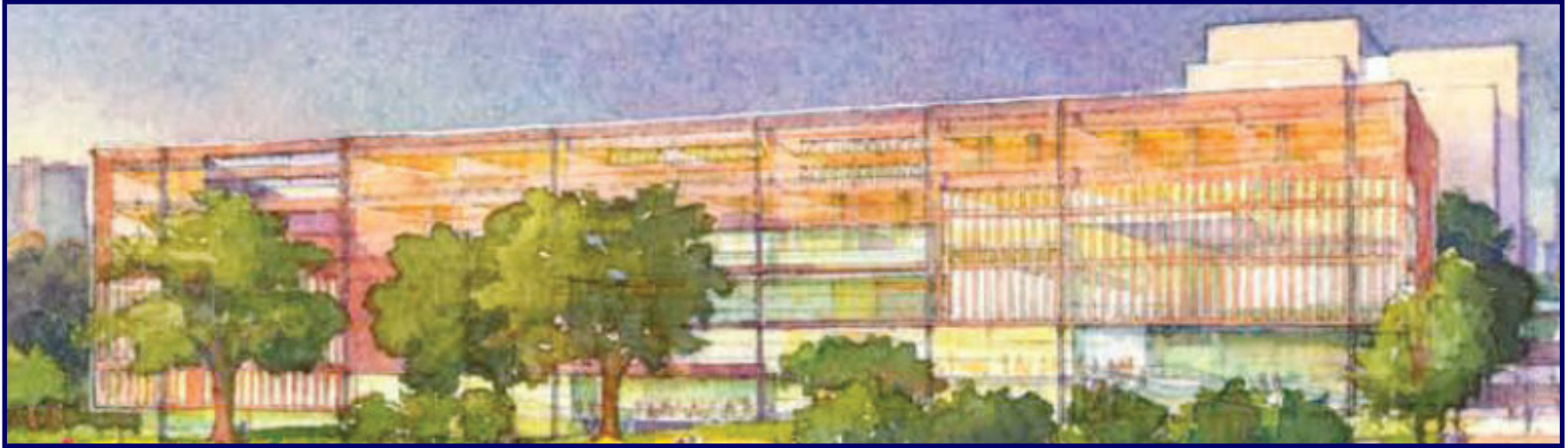
- On schedule
- On budget

- \$20 million raised
- \$14 million to go





# Undergraduate Learning Center

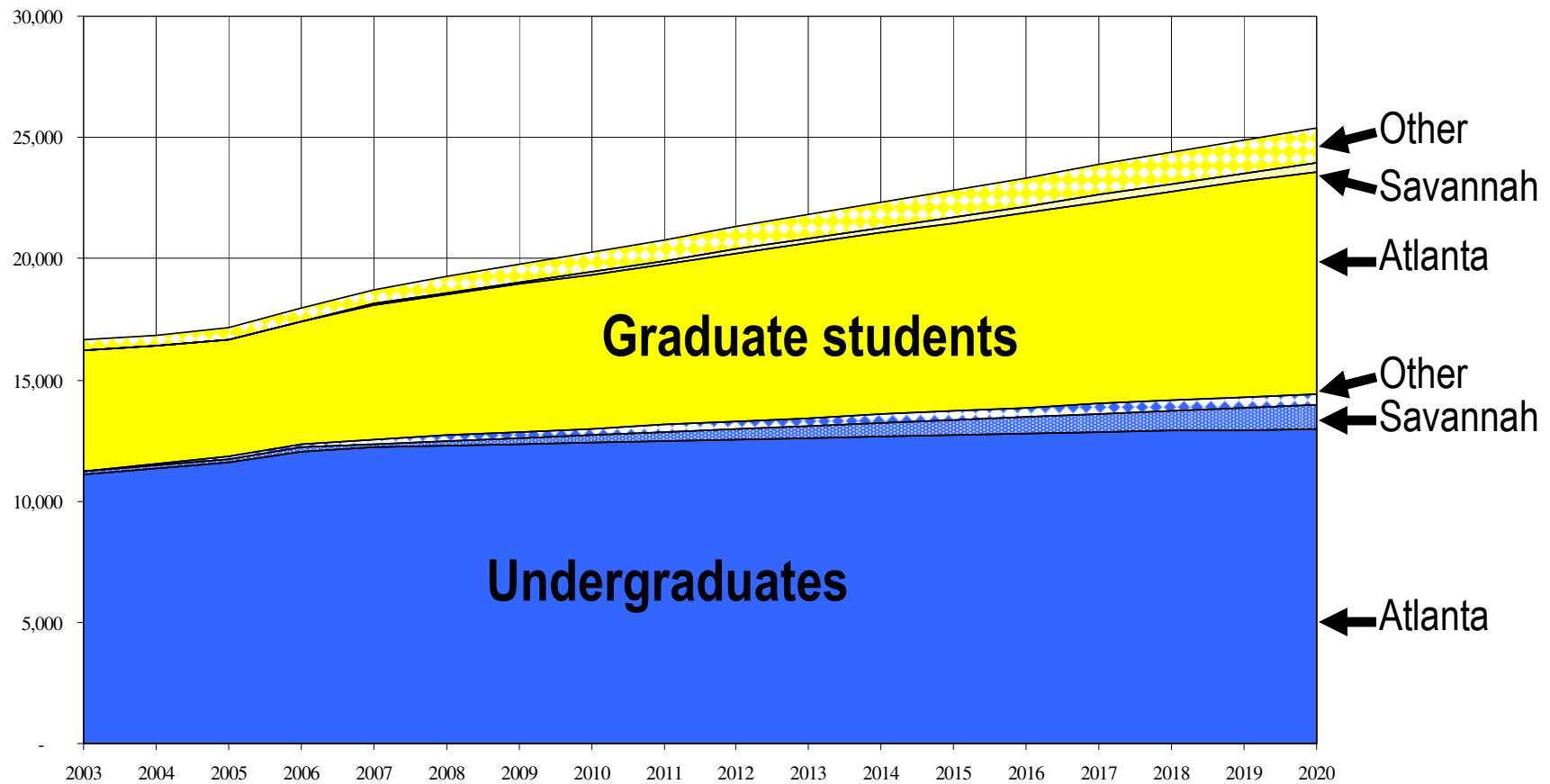


- 8 chemistry labs
- 8 physics labs
- 5 biology labs
- 15 classrooms
- 2 large lecture halls
- Academic services
- Information Commons

# Enrollment considerations

- University System goal: Increase enrollment by 100,000 students by 2020
- Georgia Tech: 7 percent of System enrollment
- Implication: Georgia Tech would grow by 7,000 students to a total enrollment of about 25,400 by 2020
- About 2,700 of the additional students would be online or at other campuses than Atlanta

**Enrollment Plan by Campus**  
**Fall 2003-Fall 2007 Actual**  
**Fall 2008-Fall 2020 Projected**





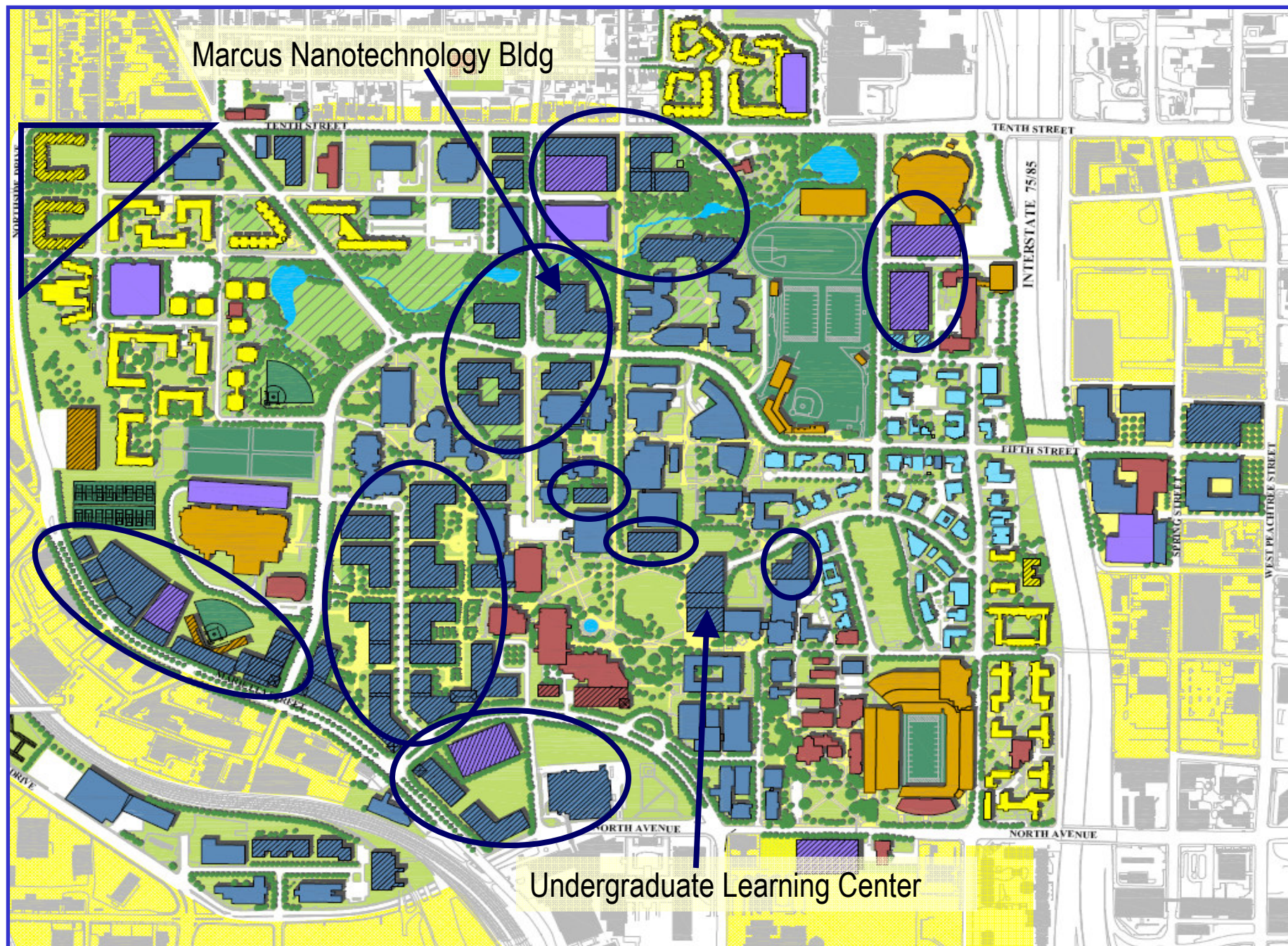
# Other considerations

## ➤ Faculty:

- ▷ To maintain current ratio of 22:1 – 300 more faculty by 2020
- ▷ To achieve our goal of 18:1 – 566 more faculty by 2020

## ➤ Research: Continuing present trend of at least 4 percent annual growth in expenditures – \$764 million by 2020







# GT capital needs FY 09 – FY 14

Facility	Cost
Undergrad Learning Center	\$85 m
Engineered Biosystems Bldg	\$96 m
High Performance Computing Ctr	\$80 m
Interdisc High Bay Research Lab	\$15 m
Health Systems Inst., Tech Square	\$85 m
ECE Van Leer expansion I	\$45 m
Hinman Bldg renovation	\$10 m
Eco-Commons, Phase I	\$ 8 m

# GT capital needs FY 09 – FY 14

Facility	Cost
EH&S admin, waste storage	\$10 m
Grinnell Bldg renovation	\$ 3 m
East Campus Parking Deck	\$20 m
North Campus chiller plant	\$20 m
Howey Physics expans, renov	\$65 m
Security/Parking Bldg	\$ 7 m
IAC renewal/enhancement	\$28 m
Centennial Research Bldg II	\$90 m

# GT capital needs FY 09 – FY 14

Facility	Cost
GT Sav: Engineering Systems	\$42 m
Library renovation	\$54 m
North Campus Parking Deck	\$20 m
Eco-Commons II	\$ 6 m
Southwest Campus chiller plant	\$40 m
ECE Van Leer renovation II	\$35 m
<b>TOTAL</b>	<b>\$864 m</b>



# GT Capital needs FY 09 – FY 14

<b>Total</b>	<b>\$864 m</b>
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State appropriation	\$344 m
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GT funds	\$ 28 m
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Donor funds	\$101 m
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Other financing	\$391 m
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# USG capital funding model

FY 09 – FY 14

- Governor/General Assembly would commit to providing \$1.7 billion total over 6 years (beginning with \$250 million per year, increasing by 5 percent each year).
- Regents would allocate based on a funding formula. Units to prepare 6-year strategic plans showing how and when funds would be used.
- Georgia Tech's share would be \$147.2 million over 6 years
  - ▷ 8.7 percent of the \$1.7 billion in state funds.
  - ▷ 17 percent of our total need.
  - ▷ 43 percent of what we would like to have from the state.

# What are our options?

- Scale back plans for growth.
- Raise more private funds for construction.
- Argue for more state funding.
- Find a unique justification for one or more projects, resulting in their being separated out of the Regents capital process.
- Work with Chancellor and state officials to create larger or special pool of funds to accelerate projects that have private funding, have a bearing on economic development, or support innovative goals.
- Work with third parties on lease-to-own deals
- All of the above.